

Applicants: Sheldon et al.  
Serial No. 09/945,179  
Page 2

## CLAIMS

1. (Previously presented) A method for detecting myocardial ischemia, the method comprising:

- obtaining a first signal indicative of dynamic mechanical activity of a heart;
- obtaining a second signal indicative of electrical activity of the heart; and
- detecting myocardial ischemia based on both the first signal and the second signal, and in the event a myocardial ischemia condition is detected, notifying the patient.

Claims 2 to 24 (canceled)

25. (Previously presented) A method for detecting myocardial ischemia, the method comprising:

- obtaining a first signal indicative of dynamic mechanical activity of a heart;
- obtaining a second signal indicative of electrical activity of the heart; and
- detecting myocardial ischemia based on both the first signal and the second signal, further comprising determining a location of ischemic tissue based on the first signal and the second signal.

26. (Previously presented) A method for detecting myocardial ischemia, the method comprising:

- obtaining a first signal indicative of dynamic mechanical activity of a heart;
- obtaining a second signal indicative of electrical activity of the heart; and
- detecting myocardial ischemia based on both the first signal and the second signal, wherein the first signal includes a plurality of first signals, each of the first signals indicating dynamic mechanical activity of the heart along one of a plurality of axes, the method further comprising determining a location of ischemic tissue based on the plurality of first signals.

Applicants: Sheldon et al.  
Serial No. 09/945,179  
Page 3

27. (Previously presented) The method of claim 26, wherein the second signal includes a plurality of second signals, each of the second signals indicating electrical activity of the heart along one of a plurality of axes, the method further comprising determining a location of ischemic tissue based on the plurality of first signals and the plurality of second signals.

Claims 28 to 33 (canceled)

34. (Previously presented) A system for detecting myocardial ischemia, the system comprising:

- a first sensor that generates a first signal indicative of dynamic mechanical activity of a heart;

- a second sensor that obtains a second signal indicative of electrical activity of the heart; and

- a processor that detects myocardial ischemia based on both the first signal and the second signal, wherein the processor, when myocardial ischemia is detected, notifies the patient.

Claims 35 to 49 (canceled)

50. (Previously presented) A system for detecting myocardial ischemia, the system comprising:

- a first sensor that generates a first signal indicative of dynamic mechanical activity of a heart;

- a second sensor that obtains a second signal indicative of electrical activity of the heart; and

- a processor that detects myocardial ischemia based on both the first signal and the second signal, wherein the processor quantifies a degree of ischemia based on the first signal and the second signal.

Applicants: Sheldon et al.  
Serial No. 09/945,179  
Page 4

51. (Previously presented) A system for detecting myocardial ischemia, the system comprising:

a first sensor that generates a first signal indicative of dynamic mechanical activity of a heart;

a second sensor that obtains a second signal indicative of electrical activity of the heart; and

a processor that detects myocardial ischemia based on both the first signal and the second signal, wherein the processor determines a location of ischemic tissue based on the first signal and the second signal.

52. (Previously presented) A system for detecting myocardial ischemia, the system comprising:

a first sensor that generates a first signal indicative of dynamic mechanical activity of a heart;

a second sensor that obtains a second signal indicative of electrical activity of the heart; and

a processor that detects myocardial ischemia based on both the first signal and the second signal, wherein the first signal includes a plurality of first signals, each of the first signals indicating dynamic mechanical activity of the heart along one of a plurality of axes, and the processor determines a location of ischemic tissue based on the plurality of first signals.

53. (Previously presented) The system of claim 52, wherein the second signal includes a plurality of second signals, each of the second signals indicating electrical activity of the heart along one of a plurality of axes, and the processor determines a location of ischemic tissue based on the plurality of first signals and the plurality of second signals.

54. (cancelled)

Applicants: Sheldon et al.  
Serial No. 09/945,179  
Page 5

55. (Previously presented) A system for detecting myocardial ischemia, the system comprising:

a first sensor that generates a first signal indicative of dynamic mechanical activity of a heart;

a second sensor that obtains a second signal indicative of electrical activity of the heart; and

a processor that detects myocardial ischemia based on both the first signal and the second signal, wherein the first sensor includes a multi-axis accelerometer and the first signal includes a plurality of heart acceleration signals, each of the heart acceleration signals indicating contractile acceleration along one of a plurality of axes, the processor determining a location of ischemic tissue based on the heart acceleration signals.

Claims 56 to 67 (canceled)